## **AUTOMATIC EXTERNAL DEFIBRILLATOR (AED) PROCEDURE**

#### 1.0 **PURPOSE**

This procedure provides guidelines to assist departments in the event of a medical aid situation or emergency requiring the use of an automatic external defibrillator (AED) for sudden cardiac arrest (SCA).

#### 2.0 **POLICY**

The City shall establish an AED procedure and ensure its effectiveness wherever authorized implementation occurs. The procedure shall be specific to each site as well as specific to the type and model of AED used. Authorization to procure and deploy AEDs shall be made by the Department Head or City Manager.

Only trained personnel shall be permitted to work under this procedure and each person trained in AED usage shall be designated as a Qualified AED Responder (QAR). This procedure is geared specifically to non-EMS personnel.

The physical placement of AEDs within a facility shall incorporate a travel distance (fast-paced walking including stairs) of not more than three minutes to a victim within the same facility.

#### 3.0 **PROCEDURE**

#### 3.1 Medical Emergency

- 3.1.1 In case of a medical emergency, activate Emergency Medical Services (EMS/Paramedics) immediately using one or more of the following:
  - a) Dial 9-911 from a City telephone
  - b) Dial 911 from a non-city telephone
  - c) Dial (562) 435-6711 from any cellular telephone (in Long Beach)
- 3.1.2 Be prepared to provide the operator with the following information:
  - a) Nature of the emergency
  - b) Exact location (floor, room number, yard number, etc.)
  - c) Type of injury or illness
  - d) Phone number you are calling from
- 3.1.3 DO NOT hang up until the operator does or tells you to.
- 3.1.4 DO NOT move the victim unless there is a danger of further injury by staying where you are.
- 3.1.5 Keep the victim as calm as possible. If symptoms of shock appear (paleness, cold sweat, rapid breathing, and/or weak pulse), have the victim lie down with feet elevated.
- 3.1.6 Alert a Floor Warden for assistance.
- 3.1.7 Have a fellow employee direct EMS to the scene by meeting them at the main entrance to your facility. If your facility has an elevator, alert security or other person to hold an elevator for EMS.

3.1.8 If qualified, render appropriate medical aid until EMS arrives.

# 3.2 Automatic External Defibrillator (AED) and Cardiopulmonary Resuscitation (CPR)

## 3.2.1 Purpose

An AED will enable QARs to deliver early defibrillation to victims in the critical moments after a sudden cardiac arrest. Use of an AED shall not replace the care provided by EMS providers; rather it is meant to provide a lifesaving bridge during the first few critical minutes it takes for advanced life support providers to arrive. Upon arrival of the EMS providers, patient care should be transferred accordingly.

### 3.2.2 Medical Director

The Medical Director (Occupational Health Services Officer) shall have authority over the entire AED program and its participants. General responsibilities include the establishment and maintenance of the guidelines for care included in this procedure. In addition, the Medical Director shall also provide quality assurance, compliance with procedures, proper training and positive reinforcement to QARs and the system, as well as corrective instruction.

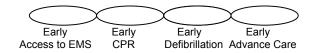
#### 3.2.3 AED Coordinator

The AED Coordinator shall act as the primary liaison between the City's AED program and the Medical Director. This coordinator shall oversee maintenance of AEDs and supplies, organize training and refresher training, forward any incident data to the Medical Director and hold post-incident debriefing for employees involved. For the purpose of this program, the AED Coordinator is the City Safety Officer.

## 3.2.4 Qualified AED Responder (QAR)

QARs shall be designated by management and trained in the proper use of the AED in an emergency and during a drill. These individuals shall be trained and work under the direction of the Medical Director. QARs shall be responsible to perform daily inspections of AEDs and provide inspection reports to the AED Coordinator by the 15<sup>th</sup> of every month. In addition, QARs must notify the AED Coordinator immediately if problems are found with an AED.

### 3.3 Chain of Survival



(See Attachment 2, AED and CPR Flowchart)

- 3.3.1 Early Access to EMS (9-9-1-1 from a City phone)
  - a) Assess scene safety.
  - b) Assess responsiveness. Tap shoulder and shout, "Are you OK?"
  - c) Call 9-1-1. Provide dispatcher with location and details. Indicate that an AED is available on-scene.
  - d) Broadcast over the PA system an announcement to activate QARs and

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the location of the patient (e.g., CODE BLUE, Lobby Level).

- e) Retrieve AED and take to scene.
- f) Have someone wait for EMS personnel so they can lead them to the patient
- 3.3.2 Early CPR (Qualified Personnel Only)
- 3.3.3 Early Defibrillation (QAR Only)

If appropriate, refer to attached AED Treatment algorithm.

- 3.3.4 Early Advanced Cardiac Life Support
  - a) Have a designated person wait for EMS providers at front entry of main building and help guide them through building and security doors to the patient.
  - b) Responders working on the victim should provide the following information to the EMS providers in order of importance:
    - 1) Initial and current condition of victim.
    - 2) Number of shocks delivered (AED screen).
    - 3) Length of time defibrillator has been used (AED screen).
    - 4) Time the victim was found.
    - 5) Any known medical problems, allergies or medical history.
    - 6) Victim's name.
  - c) Assist EMS providers as requested.
  - d) Leave AED in place.

### 3.4 Post-Incident Procedure

- 3.4.1 The AED Coordinator shall perform the following after each AED use:
  - a) Notify the Medical Director.
  - b) Remove the used PC data card and replace it with a spare. Label the used PC data card with patient information and deliver to the Fire Department for downloading. The AED Coordinator shall ensure that the results of the download are forwarded to the Medical Director.
  - c) Conduct employee incident debriefing as needed.
  - d) Complete an incident report and forward it to the Medical Director.
  - e) Restock any used electrode pads, batteries, razors or gloves. Inspect unused supplies for any damage or expiration dates. (Refer to Attachment 1).
  - f) Clean the AED if needed. Review User's Guide for list of appropriate cleaning agents.
  - g) Perform Battery Insertion Test (BIT) if hourglass indicator on AED does not appear to be functioning properly. If a battery is "low" or has been exhausted, write "low battery" on it.

## 3.4.2 Regular Maintenance

See User's Guide for complete maintenance schedule. Refer To Attachment 1 for the AED equipment inventory list.

- a) Daily and After Each Use
  - 1) Check the status indicator on the AED. Note the following indicators:
    - Alternating dark square and hourglass shapes: indicates ready for use and has passed the last self-test.

- Flashing red X and chirping sound: indicates a self-test error or that the battery is low or depleted
- Solid red X: indicates that the battery is completely depleted or that a self-test error has occurred.
- Ensure all supplies, accessories and spares are present and are in operating condition. Check expiration dates and any obvious signs of damage.
- b) Quarterly
  - 1) Perform BIT.
- c) Weekly and After Each Use
  - 1) Inspect the exterior and connector for signs of damage.
- d) After Each Use
  - 1) Inspect the exterior and connector for dirt or contamination.
  - 2) Check status indicator.
  - 3) Remove PC data card and replace it with a spare. Apply a patient ID label to the used PC data card and deliver to the appropriate personnel.
- e) Inspection records shall be maintained.

#### 4.0 TRAINING

## 4.1 AED Responders

For the purposes of this procedure, all personnel under the scope of this procedure shall receive initial and refresher training through the City Safety Officer in the following topics:

- 4.1.1 Basic First-aid (3 hours, every 3 years)
- 4.1.2 AED/CPR training (4 hours, annually)
- 4.1.3 Bloodborne pathogens (4 hours, annually)

### **Attachment 1**

## **AED Equipment Inventory List**

- One AED
- One carrying case
- One User's Guide
- □ Two sets of electrodes (check expiration dates)
- One installed battery on stand-by
- One spare battery
- One installed PC data card
- One spare PC data card
- One mouth barrier device
- One pair of EMS scissors
- One set of protective gloves
- One razor
- □ 8x8 cloth

### **Attachment 2**

Automated External Defibrillation (AED) and Cardiopulmonary Resuscitation (CPR) Flowchart

SCA: Sudden Cardiac Arrest

